

WHAT IS CLAIMED IS:

1. A decoder for temporarily storing in a buffer memory
in sector units digital data having a predetermined number
5 of bytes processing the digital data by correcting and
detecting code errors included in the digital data, and
transferring the processed digital data, the decoder
comprising:

10 a check head register for storing a first address of
the buffer memory when the storing of the processed digital
data to the buffer memory is started;

a check sector counter for counting the number of
sectors of the processed digital data stored in the buffer
memory to generate a count value;

15 a command decision circuit connected to the check head
register and the check sector counter for deciding whether
the digital data requested to be transferred is stored in
the buffer memory based on the first address, the count
value, and a head address of the digital data requested to
20 be transferred; and

a command register connected to the command decision
circuit for storing a data transfer request command, wherein
the command decision circuit permits the decoder to transfer
the processed digital data when deciding that the digital
25 data requested to be transferred is stored in the buffer
memory.

2. The decoder according to claim 1, wherein the count
value corresponds to an address interval of the processed
30 digital data occupying the buffer memory, and wherein the
command decision circuit adds the address interval to the
first address to generate a comparison address and decides
whether the digital data requested to be transferred is

stored in the buffer memory by comparing the comparison address and the head address of the digital data that is requested to be transferred.

5 3. The decoder according to claim 2, wherein the command register stores the data transfer request command that includes address information, wherein the command decision circuit decides the head address of the digital data requested to be transferred based on the address
10 information.

 4. The decoder according to claim 2, wherein the command decision circuit decides the head address of the digital data that is requested to be transferred based on
15 address information received from an external microcomputer.

 5. The decoder according to claim 1, wherein the decoder is a CD-ROM decoder.

20 6. The decoder according to claim 1, wherein the decoder is a DVD decoder.